

# NIC ANALYSIS

LEHMANN

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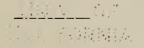


## HARMONIC ANALYSIS

-BY-

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and Lessons in Harmony.



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#### PREFACE.

It is hardly necessary to enter into a discussion as to the value of "Analysis of Harmony and Form" in gaining a clearer and more intelligent view of music and a keener appreciation of it. That is taken for granted by all who have made a serious study of the subject.

There are many students who have undoubted executive ability but who have no power of invention in writing music. It is for the purpose of giving students of this kind a more intelligent view of the structure of music, both as to harmony and form, that a course in the "Analysis of Harmony and Form" was inaugurated in Oberlin Conservatory of Music. That this was wise has been proven time and again during the eight years that it has been in use. The student becomes more intimately acquainted with the masters, their peculiarities and mannerisms, thus enabling him to give a much more intelligent interpretation of their works.

As an aid in memorizing music, analysis also has great value. It enables a student at a glance to see the harmonic and formal structure which provides him in a way with guide posts in the shape of harmonic progressions and formal divisions to lead him on.

It has also been found to be an inspiration to some to continue the study of advanced theory and free composition.

It is not the plan of this book to cover the entire ground of harmonic analysis; that is obviously impossible in twenty-four lessons. It is, however, its plan to present material in such a manner that after its own completion the student may continue the work of analysis by himself, taking up entire compositions where only excerpts have been taken and studying the peculiarities of composers and of schools. If the work has done this its object has been accomplished.

It is primarily a work for the class room, assigning definite lessons, avoiding any discussion of points in notation, etc., on which there is a difference of opinion, and couched in language that is not too technical.

A knowledge of harmony is presupposed, nevertheless chord constructions and a few other points have been explained to some extent.

In the selection of the material to be analyzed the author has endeavored to gather it from such sources that the student may come into touch with many different composers of different schools. Not many of the more complex of the modern compositions have been selected since a still wider experience is needed, both as an analyst and in comprehension, than a student may have at this time.

In the lesson on Enharmonics it was necessary to touch upon modulation before exercises containing modulations were regularly taken up. This lesson might have been put after modulation but since neither modulation nor Altered Chords can be analyzed without involving Enharmonics it was thought better to put that lesson in its present location.

Difficulty has been experienced in giving an exact limit to the province of the different harmonic structures, as when a chord should be considered an Attendant chord, or when an Altered chord (chord of the Augmented sixth, Neapolitan sixth, etc.,) and when a change of key has taken place. Time value, the ear, and, not least, personal opinion have so much weight in the above that the author knows full well that no exact limits can be set to the province of these chords. Differences of opinion will also occur as to whether a change of the lowest part affects the ear as change of position of the chord; whether the passing seventh and ninth are heard as such or merely as passing tones; whether, in broken chords, several groups of tones taken together give a single chord effect or if each group represents a chord in itself, and to the above may be added many other points on which no definite instruction can be given. In these the individual must decide for himself.

The author has endeavored to give directions that will enable the student to make an intelligent analysis of such points as may be in dispute. It is to be hoped however that the teacher's view will be broad enough to recognize good and reasonable solutions which have been reached without a rigid adherence to the text.

Under Modulation such material has been considered as will give the student an intelligent view of this field and enable him to explain any modulations which he may meet.

It has been thought well to dwell a little more fully than is customary, on the Greek Modes, especially since they are used so frequently in modern music.

In a few instances the exercises have been slightly altered or marked so as not to present material for analysis that is in advance of the lesson.

The lessons have been outlined primarily for use in Oberlin Conservatory of Music.

June 2, 1909.

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### HARMONIC ANALYSIS

### **ERRATA**

Ex.	23, 2nd measure 3d beat, natural before a.
4.4	27, 3d measure 1st beat, shift natural up to c.
4.4	29, 2nd measure 1st beat, shift sharp down to c.
6.6	38, 4th meas.:re 2nd beat a in bass should be marked app.
6.6	39, Cap. C for name of key.
4.4	53, 6th measure 1st beat, natural for a.
4.4	55, 6th measure 3d beat add b in alto.
4.4	105, 6th measure 3d beat, a sharp not a natural.
4.6	141, 9th measure 2nd beat, a not g in sop.
4.4	161, 1st measure 1st beat, flats for c & g.
4.4	167, 3d measure 1st beat, natural for f.
6.6	177, 1st measure 1st beat naturals for both g's.
6.6	184, 2nd measure sharp for first a & natural for second a.
4.6	190, 7th measure 2nd & 3d beats c not b, in alto.
4.4	192, 3d measure lower staff treble clef,
4.4	232, 7th measure g sharp in sop. not b.
4 4	247, 7th measure 4th beat g (1st line) in bass.
4.6	256, 9th measure 2nd beat natural for g in bass.
4.4	257, 6th measure 3d beat, alto $a$ natural & $f$ sharp not $a$ sharp & $f$ natural.

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LESSON	XIX.	Reduction	128-136
LESSON			
XX	-XXIV.	Review Exercises	136-156

In the selection of the material to be analyzed the author has endeavored to gather it from such sources that the student may come into touch with many different composers of different schools. Not many of the more complex of the modern compositions have been selected since a still wider experience is needed, both as an analyst and in comprehension, than a student may have at this time.

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#### INTRODUCTION.

Harmonic analysis is the art of accounting for everything in the harmonic and melodic structure of music.

In analyzing the work in the following lessons everything in its harmonic and melodic structure should be considered and accounted for harmonically. This involves naming the key, marking the chords and their inversions and, in later lessons, the non-harmonic devices used. Be prepared to justify the analysis. It must be clear why the chords have been marked as they are.

The analysis is to be written into the text as illustrated in the examples.

When several solutions are possible write out each with different colored inks or pencils, stating your preference however. Write out full enough so that no tax on the memory is necessary.

Since the exercises to be analyzed are but excerpts of larger works the signature does not always indicate the key. Always notice before marking the key, whether accidentals have been used changing it from that of the signature.

The lessons are accompanied by many analyzed examples. Examine these carefully. They are not only valuable as illustrating the points in question, but will no doubt also prove helpful in the general matter they contain.

Spell chords accurately. In constructive work in harmony the student often forms the habit when spelling chords of disregarding the sharps or flats since the signature takes care of those. In analysis it is absolutely necessary for a correct solution, to make the spelling complete, always to mention the sharp or flat. To illustrate, in spelling the dominant seventh chord in the key of D major, spell it A, C\$\mu\$. E, G, and not A, C, E, G, thinking that the signature will take care of the sharp.

Grace notes are to be analyzed the same as any others.

Ornamentations that are written out fully should also be analyzed. When these are indicated by a sign only they are not to be recognized in the analysis.

Signs used for marking will be mentioned as the occasion demands.

It is often well to begin working backwards since it is sometimes necessary to see the progression of a chord to tell what it is.

As a further aid in the following work the author recommends that, beginning with Lesson II, the student take up compositions of different kinds and find in them the particular points of the lessons and mark them. A list of references might have been added to each lesson, but it has been found more valuable for the student to find the points in question for himself. This is particularly true in constructions that are less frequently used since he may have to look over many measures before finding them, thereby gaining much in sight analysis.



### Harmonic Analysis.

#### Lesson I.

TRIADS AND CHORDS OF THE SEVENTH.

TRIADS.

Major keys are indicated by capital letters. Minor keys by small letters, Fig. I.

In major keys the triads on the different degrees are marked as follows:

I, II, III, IV, V, VI, VII°.

In minor keys:

1, 11, III', 1V, V, VI, VII'.

The signs of inversion are:

First inversion (3rd in the lowest part) 6.

Second inversion (5th in the lowest part) 4.

The sign of the inversion is placed to the right of that of the degree as follows: 116, I6, etc.

Change of position of the upper voices while the lowest voice remains the same, does not affect the harmony and need not be marked, Fig. 1a.



#### EXERCISES

CORELLI. Gavotte.



CHORDS OF THE SEVENTH.

Adding a third above the 5th of a triad (7th above the root) forms a chord of the seventh.

Signs for marking these chords and their inversions are as follows:

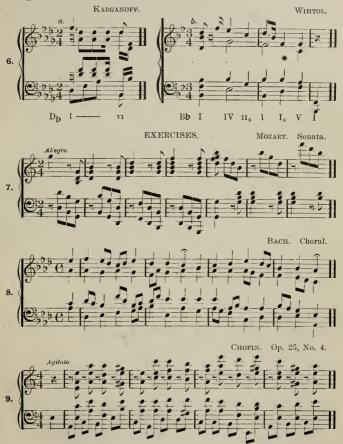
Root position (root in the lowest part) 7. First inversion (3rd in the lowest part)  ${6 \atop 5}$  or  ${6 \atop 5}$ . Second inversion (5th in the lowest part)  ${4 \atop 3}$  or  ${4 \atop 3}$  or  ${4 \atop 5}$ . Third inversion (7th in the lowest part) 2,  ${4 \atop 5}$  or  ${4 \atop 5}$ .

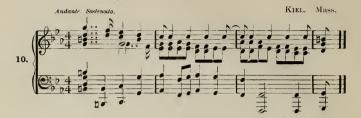


It often occurs, with harmony remaining the same, that the lowest part moves to different chord members, a broken chord, without affecting the ear as a real change of the position of the chord. This is particularly true in quick tempo. The first note usually marks the position of the chord.

In doubtful cases mark each change of the lowest part

In Fig. 6u no change of inversion is felt, while 6b must be recognized as a change of inversion.

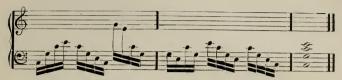




BROKEN CHORDS.

Chords, instead of sounding all parts simultaneously, may be broken into different forms of arpeggios, or the many different forms of accompaniments. Fig. 11. These, in all cases, are analyzed as though all the tones were sounded simultaneously. The lowest tone, whether continuing throughout the chord or not, marks the position of the chord. This principle is adhered to throughout, in analysis.





In broken chord effects it is often well to consider more than one group of notes as belonging to the same chord formation, rather than to call each group a different chord. While the latter may not be incorrect, the ear, in many instances, accepts more than one group as representing one harmony. This is particularly true of notes of short value. When doubtful mark each group. Fig. 12

BACH. Prelude. COLERIDGE-TAYLOR. Op. 59, No. 5.



Chords of the seventh when changing position often appear with different members omitted, at times forming a triad on another degree as in Fig. 13. No marking is necessary for this.





Eb IV<sub>7</sub> 11<sup>6</sup><sub>5</sub> -----

EXERCISES. BEETHOVEN. Op. 109.

Vivace.

14.



\* Passing tone.







#### Lesson II.

THE DOMINANT NINTH, SUSPENSION, RETARDATION, AND PASSING TONE.

THE DOMINANT NINTH.

Adding a third above the 7th of a chord of the seventh (9th above the root) forms a chord of the ninth. The only chord of the ninth that is to be analyzed as such is the Dominant ninth. The uninths of other chords will be treated as non-harmonic tones in later lessons Fig. 19.

When the dominant ninth chord has its third omitted, the ninth resolving npward to the third, the ninth is to be analyzed as an appoggiatura (see Lesson III). The present lesson contains none of the above.

The Dominant ninth often appears with the 5th omitted. Signs for marking this chord are as follows:

Root position (root in the bass) 9.

First inversion (3rd in the bass)  $\frac{6}{5}$ .

Second inversion (5th in the bass)  $\frac{6}{4}$ .

Third inversion (7th in the bass)  $\frac{3}{2}$ .

Fourth inversion (9th in the bass)  $\frac{6}{5}$ .

The fourth inversion is seldom used.



EXERCISES.

BARGIEL. Nocturne.



- Appoggiatura.
- \* Embellishments.



\* Embellishment.



Brahms, Requiem.



\* Passing tone.

THE SUSPENSION.

A tone foreign to the chord with which it appears, that has been prolonged or continued from the preceding chord, is a suspension when descending one degree to a chord tone and a retardation when ascending one degree to a chord tone. Fig. 24.

If suspensions produce chords of the seventh they should be analyzed as such, unless they are incomplete, when they should be marked as triads with suspensions. Exceptions to this are found in the dominant seventh and in the succession of chords of the seventh in root position resolving to chords a fourth higher, in which case the fifth is omitted in alternate chords.

When the suspension or any of the non-harmonic devices used in later lessons appear in octaves it is necessary to mark only one of the tones.

Suspensions and retardations may occur simultaneously in several voices.

Signs: Suspensions, s; Retardation, R.



\* Appoggiatura.





The Passing tone is a non-harmonic tone that is approached and left step. wise in one direction. It may be accented or unaccented, diatonic or chromatic. It is accented when on the accented beat or part of a beat, and unaccented when elsewhere. When it is the first note in triple rhythm or groups of three, it is accented, when the second or third, unaccented. Notes of shorter values than eighths are analyzed in groups of two beginning with the beat, the first being accented the second unaccented. Fig. 29.

Passing tones may succeed one another. When the passing seventh or ninth of a chord is of short value, or is one of a series of passing tones, the impression is that of a passing tone and not that of a seventh or ninth, and should be so marked.

Signs: 0 Accented Passing tones. + Unaccented Passing tones.





DIATONIC PASSING CHORDS.

A succession of Chords progressing degreewise over a stationary lowest part as in Fig. 33, is Diatonic passing chords. Mark the first and last chords only, indicating the intervening chords as passing chords. This principle applies to notes of short values only, since the same thing in slow tempo would give a definite chord impression for each chord.



### Lesson III.

### THE EMBELLISHMENT AND THE APPOGGIATURA.

### THE EMBELLISHMENT.

The Embellishment is a tone introduced by stepwise progression between a principle tone and its repetition. Fig. 35. Sign E.





THE APPOGGIATURA.

The Appoggiatura is an unprepared Suspension or (Retardation) approached by a skip of an augmented second or more. Fig. 39. Sign:  $\Lambda$ p.





EXERCISES.









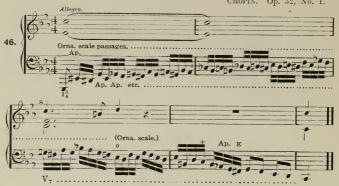


ORNAMENTED SCALE PASSAGES.

Ascending or descending scale passages (diatonic or chromatic) are often ornamented by Embellishments or Appoggiaturas. In such cases each ornamentation is to be marked as an embellishment or appoggiatura whether it is a chord tone or not. Fig. 43 and 44.

While the approach to the appoggiatura in 44 is but a whole step the effect is nevertheless that of an appoggiatura.

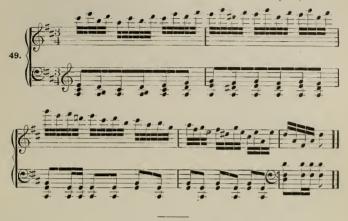




BROKEN THIRDS, SIXTHS AND OCTAVES.

Broken thirds, sixths and octaves are analyzed as though both tones were sounded at the same time. Fig. 47.





### Lesson IV.

ATTENDANT CHORDS, AND BROKEN CHORDS AND SUSPENSION (con.).

A combination of three or more non-harmonic tones form an Attendant chord. Fig 50.

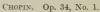
These chords usually appear in connection with some fundamental harmony, or are introduced between a chord and its repetition, and most often take the form of a chord of the diminished seventh, but are occasionally found in other forms, the tones at times, having no harmonic relation whatever to one another.

When these chords appear in broken form mark as usual, and in addition indicate by letters the chord members. Sign: At.chd.











#### EXERCISES.







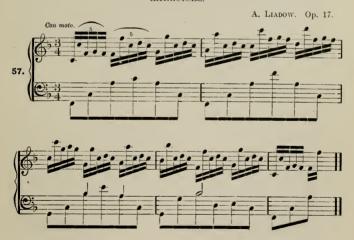
BROKEN CHORDS (con.).

It is often the case that non-harmonic tones in broken chord effects, which are approached and left by skip, should be analyzed as Susp's., App's., Passing or Embellishing tones. This may easily be determined by playing all the notes of the broken chord simultaneously. Fig. 56.





## EXERCISES.





THE SUSPENSION (con.).

The suspension may not only be prepared by a chord tone (see Lesson III), but may also be prepared by any non-harmonic tone. Fig. 59.



CHOPIN. Op. 64, No. 2. EXERCISES. JENSEN. Op. 45. CESAR CUI. Intermezzo. Allegretto.

A Series of Once Repeated Notes ascending or descending, with harmony remaining the same, is analyzed as S's. (or R's.) and their resolutions, as in Fig. 62. This, however, is done only when the first of the repeated notes is unaccented. It is quite possible to analyze such passages as anticipations (later lessons) and their resolutions. The author, however, prefers to analyze them as suspensions and their resolutions.



EXERCISE.

Снорім. Ор. 64, No. 2.



## Lesson V.

THE ANTICIPATION AND THE PEDAL POINT.

THE ANTICIPATION.

An Anticipation is a tone introduced immediately before the entry of the chord to which it belongs. It may be tied into the next chord or be repeated. Fig. 64. Sign A.



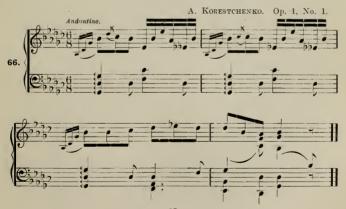


When the Anticipation instead of remaining stationary skips to some other tone of the chord to which it belongs it is a Free Anticipation. Sign: F.A. Fig. 65.

Any or all tones of a chord may be anticipated.



EXERCISES.

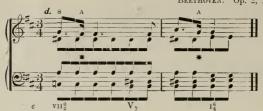






Non-harmonic tones resolving sooner than expected should be analyzed as anticipations. Fig. 70.





EXERCISES.

Снорім. Ор. 59, No. 1.





72.

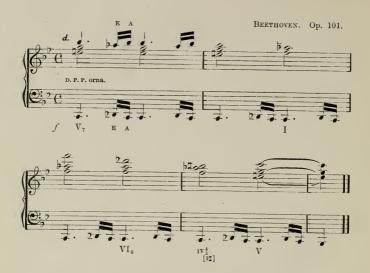


PEDAL POINT. (ORGAN POINT.)

A Pedal Point is a tone continuing through a succession of harmonies to which it may or may not belong. This tone may be sustained (a), repeated (b), intermittent (c), or accompanied by some ornamentation (d). Fig. 73.

ELGAR. Caractacus.





Two tones may be sustained in the above manner forming the double Pedal Point.

The Pedal Point may be on any degree and in any voice.

When in the lowest part it has harmonic relation only with the chords with which it begins and ends. In all intervening chords the part above it indicates the position of the chord.

In marking the Pedal Point indicate also the degree, i. e. Dominant Pedal Point is marked D. P. P., the Tonic, T. P. P., etc.







## Lesson VI.

THE ORNAMENTAL RESOLUTION AND THE FREE TONE.

#### THE ORNAMENTAL RESOLUTION.

Any non harmonic tone may have one or more tones interpolated between it and its resolution. This is called an Ornamental resolution. Fig. 72 Double and Triple Apprograturas (Fig. 78 e.f.) are to be analyzed as Ornamentally resolved non-harmonic tones. Signs: S. orna., E. orna, Ap. orna. A. orna. o orna., + orna.

Fibich. Op. 44, No. 27.





Chován. Op. 6, No. 1.





Franck. Beatitudes.



TINEL. Francis.













The presence of rests immediately before a Suspension, Embellishment or Passing tone does not affect their nature, and they should be analyzed as though no rests were present. A rest of considerable length may, however, give the effect of an appoggiatura to these notes. This must be decided by the ear since no exact rule can be given as to the length of the rest. Fig. 84.







Korestchenko. Op. 22, No. 5









THE FREE TONE.

Non-harmonic tones that are left by a skip and do not resolve ornamentally are Free Tones. Fig. 88. The use of Free Tones is comparatively rare.

Do not analyze a tone as a Free Tone except as a last resource. Sign  ${\tt F.\,T.}$ 

Снорік. Ор. 11.



BACKER-GROENDAHL. Op. 15, No. 1.





# Lesson VII.

## Enharmonics.

Tones which have different names but have the same pitch are enharmonically related and are called enharmonics.

Enharmonics are used in notating chords, which, if notated logically as the key relationship demanded, would involve the use of double sharps or double flats, adding unnecessary difficulties in reading. To illustrate:—a major traid on the minor second degree is much used. The notation of this chord in the key of Gb is Abb. Cb. Ebb. For simplicity the notation G, B, D, its enharmonic equivalent, is often used instead.

Entire passages are often changed enharmonically for the sake of simplicity in reading. A common modulation is to a key a major third lower. Modulating

thus from the key of G flat, it goes to E double flat, involving ten flats, much harder to read than the key of D, its enharmonic equivalent, which, therefore, is ordinarily used.

An exasperating use of enharmonics is their substitution, either willfully or through carelessness, in spelling chords, at times so distorting them as to make them almost unrecognizable.

The exercises in the present lesson will deal only with enharmonic change for the sake of simplicity in reading.

Misnotations will be taken up in later lessons.

Analyze the passages as written, only indicating the actual key. In cases of single chords give their correct spelling, and analyze in the corrected form. This will be sufficient recognition that the chords are enharmonics.









LIADOW. Op. 27, No. 3.





BEETHOVEN. Op. 13.





#### ALTERED CHORDS.

An altered chord is one that contains one or more chromatically altered tones, but does not modulate.

THE MINOR SUB-DOMINANT AND THE DIMINISHED SEVENTH ON THE LEADING TONE IN MAJOR KEY.

There are two chords which, though regularly found in minor keys, are frequently used in major keys. They are the minor triad on IV (minor subdominant) and the diminished seventh on  ${\rm vii}^{\circ}$ . Fig. 96 a b. The lowering of the sixth degree in major keys which brings about the alteration of these chords is quite common as will be seen in further analysis.



















## Lesson VIII.

Alterations of the Supertonic Seventh and of Cohrds of the Seventh on Other Degrees.

THE SUPERTONIC SEVENTH WITH RAISED THIRD.

This chord is identical with the dominant seventh of a key a fifth higher, but a single appearance of chords of this kind are analyzed as altered chords since they do not induce a modulation. The Dominant seventh as modulating chord is fully treated in lesson LXII.

Mark these chords as usual, and indicate the alterations in brackets, as in Fig. 102a.



#### EXERCISES.

H. PARKER. Hora Norissima.



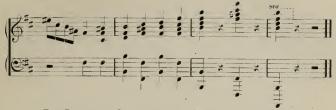


THE SUPERTONIC SEVENTH WITH LOWERED FIFTH. Fig. 102b. EXERCISES.



THE SUPERTONIC SEVENTH WITH RAISED THIRD AND FIFTH IN MINOR KEYS. EXERCISE,





THE DIMINISHED SEVENTH ON THE RAISED SECOND DEGREE.

This chord is the enharmonic equivalent of the diminished seventh on raised fourth, but is used in major keys only.

As in the case of the supertonic seventh chord, a single appearance of this chord as well as of other chords of the diminished seventh, does not induce a modulation, and should be analyzed as altered chords.

It is sometimes difficult to tell whether chord formations of this kind and those following in this lesson are really altered chords or merely Attendant chords such as are described in Lesson IV. It is in fact difficult to give exact limits to these chords, as tempo, mode of introduction and resolution play so important a part. The following directions will on the whole serve in most instances: As was said in Lesson IV, an attendant chord usually appears in connection with a fundamental harmony, or is interpolated between one and its repetition. To be an altered chord then, a chord should stand by itself and resolve to a chord other than that which precedes it. When doubtful mark as altered chords. Fig 106.

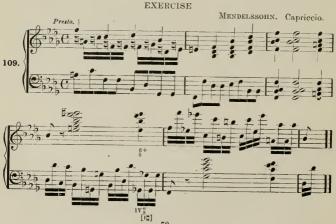




THE DIMINISHED SEVENTH ON THE RAISED FOURTH DEGREE.

This chord, although the enharmonic equivalent of the preceding chord is, however, found in both major and minor keys. Some writers hold that the former chord is but a misspelt diminished seventh chord on the raised fourth degree. A discussion of this is not necessary here. Fig. 108.





Chords of the diminished seventh are also found on the raised first, fifth, and sixth degrees in major keys, and on the raised third degree in minor. These usually resolve respectively, to  $\pi$ ,  $\pi$ ,  $\pi$ , or some form of  $\pi$ , and to  $\pi$ .

#### EXERCISES.









#### Lesson IX.

CHORDS OF THE AUGMENTED SIXTH.

Probably the most frequently used of the Altered chords are those of the Augmented Sixth, so called because of the interval of an augmented sixth above their lowest part.

As far as the spelling of these chords is concerned they are chords of the seventh, but are seldom thought of as such. They are so often used in the inversions, which give them their names, that these are looked upon as their conventional forms, and they are usually thought of as built, not on a root, but on the note that is in the lowest part.

There are four kinds of these chords:

The Augmented Sixth (marked 6+) comprising a major third and an augmented sixth above the lowest part (a);

The Augmented six-four-three, (marked  $\frac{6+}{3+}$ ) comprising a major third, augmented fourth, and augmented sixth above the lowest part (b);

The Augmented six-five (marked  $6^+$ ) comprising a major third, perfect fifth, and augmented sixth above the lowest part (c); and

The Doubly Augmented Fourth, (marked  $\frac{d+1}{d+1}$ ) comprising a major third, doubly augmented fourth, and augmented sixth above the lowest part (d). Fig. 114.

Chords of the Augmented sixth with doubly augmented fourth are considered, by many writers, to be misnotated Augmented Six-five chords. Whatever one's opinion may be it will help the clearness of the solution to analyze the 6+ chords as such.



The following exercises contain no misnotations. These will be taken up later.

Mark the chord regularly, indicating also the altered intervals as directed in previous lessons. Put the sign of the chord (6+, 6+, etc.) directly above.

















## Lesson X.

CHORDS OF THE AUGMENTED SIXTH IN OTHER THAN THEIR CONVENTIONAL FORM.

Chords of the Augmented sixth are often used in other than their conventional forms, i.e. with some other interval of the chord in the lowest part than that given in the preceding exercises. Fig. 127.

In order to recognize them in these forms it is necessary to know their structure from the root. Fig. 126. In chords that do not agree with those in preceding lessons, it is necessary to find the spelling from the root and compare with the following table:

From the root the

- 6+ comprises a diminished 3rd and diminished 5th. (a.)
- $\mathbf{6}_{+}$   $\mathbf{4}_{+}$  comprises a major 3rd, diminished 5th and minor 7th. (b.)
- 6+ comprises a diminished 3rd, diminished 5th and diminished 7th. (c.)
- $^{6+}_{2++}$  comprises a minor 3rd, doubly diminished 5th and diminished 7th. (d.)













CHORDS OF THE AUGMENTED SIXTH MISNOTATED.

There are many instances of misnotation in chords of the Augmented Sixth. It occurs most often with the \$\frac{a}{2}\$+ chord in which the upper note of the interval of the augmented sixth is made a minor seventh, giving the chord the appearance of a dominant seventh. The resolution of the chord, however, shows immediately that it is a misnotated augmented sixth chord.

In cases where the spelling is still more distorted, the ear and eye must combine to detect the chord. It may be necessary to change different intervals of the chord enharmonically, until a result is secured that agrees with some chord construction. It may also be necessary to add the test of resolution to this to make the result sure.

Mark the chord as if spelled correctly, and indicate the correct spelling as in Fig. 131b.

Db I IV I II (307) [12]

BEETHOVEN. Op. 57.



Figs. 131a. and b. are passages from the variations in Beethoven's Op. 57. They are parallel passages in succeeding variations.

Note the carelessness in spelling the Doubly Augmented 4th chord.







The Neapolitan sixth is a major triad on the minor second degree in its first inversion. Marked N6. Fig. 135.

To simplify the reading, the enharmonic equivalent of these chords is often used. In the key of Db the chord would spell Ebb Gb Bbb, D F A the enharmonic equivalent, is almost always used instead.

The Neapolitan sixth is also often used in root position, and occasionally in its second inversion.

Mark as directed in the Augmented sixth chords.



#### EXERCISES

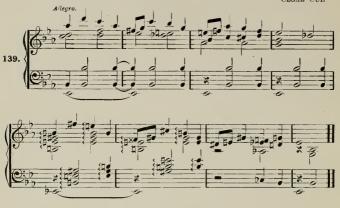




Снорім. Ор. 10, No. 2.







# Lesson XI.

## THE SKIP RESOLUTION.

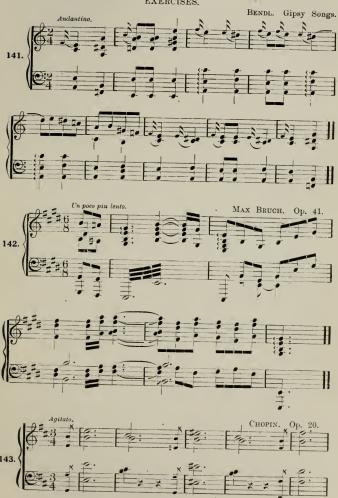
In the resolution of dissonant chords, the approach to the note or chord of resolution is, in many instances, made freely, no regard being paid to the melodic tendency of the voices. Fig. 140.

The chord of resolution in many instances is incomplete, nothing more than the root being present at times. This occurs most often in the resolution of  $V_2$  to I.

In cases of misnotated chords, with the skip resolution, it is often difficult to find the nature of a progression. It may require experimental enharmonic changes, and even then it may be necessary to write the chords in root position to see their progression.

RAVEL. Sonatine.









FRANCK. The Beatitudes.







Cadences are not only Authentic and Plagal as usually presented, but are found in various forms. Fig. 146 illustrates some of these.







# Lesson XII.

MODULATION.

Modulation is the art of progression from one key to another.

A number of means by which modulations are made from one key to another will be taken up with necessary explanations accompanying them.

It has been the endeavor of the author to present the fundamental principles in modulation, so that when the student analyzing on his own account meets modulations that are different from those given in the text, he will be able to explain them. Heretofore it was only necessary to compare a chord with the key of the composition to mark it, now it will be necessary to study its environment and note its tendency, since a chord may belong to any one of several keys.

A few words of explanation regarding terminology may not be out of place here.

The greater the difference in the number of sharps or flats between keys the more distantly related they are. Next related keys are those in which the difference is only one sharp or flat. Going to keys with more sharps or fewer flats is going to the dominant side; going to keys with fewer sharps or more flats is going to the sub-dominant side. The difference in the number of sharps or flats is the number of removes (the number of fifths) distant. To illustrate, the difference between Bb and Db is three flats, hence Db is three removes to the sub-dominant side.

ENTERING THE KEY THROUGH ITS DOMINANT SEVENTH.

A key may be entered abruptly through its  $V_7$  chord. Care, however, is necessary in deciding whether a single appearance of a dominant seventh

(when resolving to I) of a new key is a modulation or only an altered chord. In deciding whether a modulation is real or not the student is asked to consider the following: To make such a modulation permanent the new V, chord (and its resolution to I) should be followed by a complete cadence in the new key.

In slow tempo the mere repetition of a progression  $V_7$ —I in a new key at times gives a strong enough key impression to be called a modulation. After all the ear must decide, and since ears differ in acuteness there will be differences as to what a permanent modulation is. There is and always will be a diversity of opinion as to just what constitutes a permanent modulation, since no exact rules can be set down for this.

Passages progressing through many keys without periodic return to the tonic key must be analyzed differently and are taken up in later lessons.

The  $\text{vii}^{\,0}$  chord permits of the same treatment as the V, but is not often used for purposes of modulation.

Fig. 152a modulates, while 152b does not,



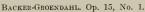


SPOHR. Last Judgment.





## EXERCISES.





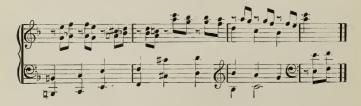


EXERCISES.















COMMON CHORD MODULATIONS.

A common chord modulation is one in which the transition to the new key is made by means of a chord that is common to both keys. If the key is so far distant that there is no common chord, then a modulation is made to an intermediate key and from it to the final key, always, however, by the use of common chords. To illustrate: in going from C major to F# major there is no common chord, hence a modulation is first made to E miner or B minor, which contain chords common to F#, and then to F#. These intermediate keys are often only touched upon, sometimes not containing more than two chords. The final key is made permanent only by an extended final cadence, i. e. a cadence containing more than the progression  $V_{\tau}$ . I.

In marking indicate the location of the chord that is common to both keys in either key, and continue marking in the new key. Mark all intermediate keys. Fig. 157.





The minor sub-dominant in major keys and enharmonics are used as common chords.

A major triad may be altered to minor or vice versa, the altered chord becoming a chord in the new key. Fig. 159.

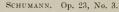




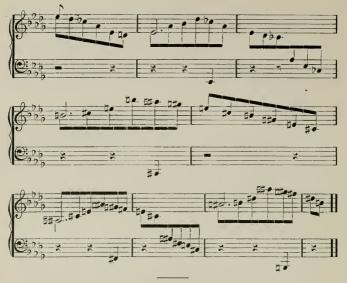


WAGNER Lohengrin.









# Lesson XIII.

MODULATING BY MEANS OF THE DIMINISHED SEVENTH ON THE RAISED FOURTH DEGREE, AND BY MEANS OF THE AUGMENTED SIXTH CHORDS.

By Means of the Diminished Seventh on the Raised Fourth Degree.

The Diminished Seventh on the raised fourth degree of the new key resolving I\_ $^6$  followed by V<sub>7</sub>, I (sometimes to V<sub>7</sub>), makes a strong permanent modulation. Fig. 163a.

In major keys this chord is sometimes notated like a diminished seventh on the raised second degree. Fig. 163b.

BEETHOVEN, Op. 7.















WAGNER. Lohengrin.







When an Augmented sixth chord in its conventional form is located with its lowest note a major third below the key-note it resolves naturally to I<sup>§</sup>. This is called its conventional position, and when so located and resolved gives a very strong feeling for the new key, and forms a permanent modulation. Fig. 168.

Misnotations occur often with these chords when used for modulatory

purposes. When they occur note them.

LISZT. Christus.













R. STRAUSS. Op. 15, No. 5.



# Lesson XIV.

Modulating by Means of the Neapolitan Chord, Alteration of the Diminished Seventh, and Deceptive Resolution of  $V_{7}$ .

By Means of a Major Triad on the Minor Second Degree (Neapolitan Sixth).

A key may be entered through the major triad on the minor second degree (N6 or  $N^8$ ). This chord and its regular resolution forms a strong permaneut close.

Mark the modulating chord (N6 or N8) in the new key, and continue in new key. Fig. 175.

For sake of simplicity in reading, this chord is often enharmonically changed when going into keys with many flats. In such cases give its true spelling.

Brahms. Nanie.

An. At. chord.

F 1 a  $n_{\rm F}$   $v_{\rm 7}$  1



Wolf. Christnacht





ALTERATIONS OF THE DIMINISHED SEVENTH TO A DOMINANT SEVENTH.

Lowering only one tone, or raising any three tones of a diminished seventh a half step, changes it to a dominant seventh. Unless such progressions and their resolution to I are followed by a final cadence, mark these chords as directed in previous lessons. Fig. 178.

SCHUMANN. Op. 12.



\* Reduction of the lower staff.

Diminished sevenths are often altered as above, and notated and resolved as the  $\frac{6}{5}$ + or  $\frac{6}{3}$ ++ chord of the new key. They are also altered so as to become  $\frac{6}{3}$ ++ chords in the new key. Fig. 179.

Mark the diminished seventh as an altered chord in the old key (if it is not  $v_{11}^{\circ}{}_{0}$ ). The Dominant seventh and the Augmented sixth chords are marked as being in the new key.

Misnotations often occur in these modulations. Indicate correct notation in such cases.

SPOHR. Last Judgment.





BENDL. Gipsy Songs.



THE DECEPTIVE RESOLUTION OF THE DOMINANT SEVENTH.

A Dominant seventh may resolve to any chord in any key, and is valuable as well as interesting as a means of modulation.

Its resolution to  $V_{\gamma}$  or I of the new key is most frequently used in modulating. Fig. 183.





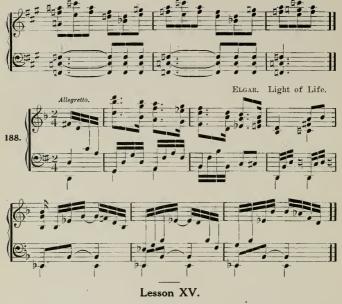
**♦** The resolution of Augmented sixth chords when in minor to major, or vice versa, is quite common.











SUCCESSION OF KEYS WITHOUT MODULATING; AND SUCCESSIVE TONICS.

There are instances when the transition to the new key is made abruptly, there being no apparent connection between the two keys. Transition of this kind are strongest when the material on entering the new key is an imitation of the preceding phrase. This, however, is not necessary. Fig. 189

















PASSAGES MODULATING THROUGH MANY KEYS.

In passages modulating through many different keys in which the feeling for the old key is entirely lost, mark all chords in their different keys. Place, however, as many chords as possible in one key before changing. Moving through different keys in this manner destroys all feeling for the tonic key, and since no one key has been clearly established, marking in the above manner is the most satisfactory.

Care must be taken when apparent modulations occur within modulations. A clear modulation may have been made to a key, and in this new key altered chords may have been introduced that touch upon still other keys, but immediately return to the new key without having made a definite key impression. These must of course be marked as altered or attendant chords in the new key. It is only when the modulations follow in quick succession that each change of key is to be noted. This is at times necessary with every chord.

#### Consecutive Dominant Sevenths.

Passages of successive dominant sevenths of different keys often occur. The most common progression of this kind is to the sub-dominant key. Other successions of dominant sevenths are not uncommon.

When three or more of these chords succeed one another mark each dominant seventh in its apparent key, otherwise mark as altered chords. Fig. 192.





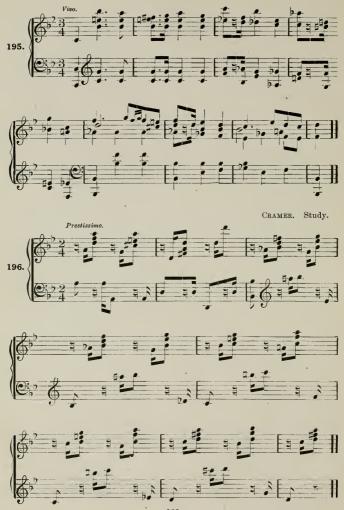
## EXERCISES.

CZERNY. Op. 335.









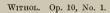
### Consecutive Tonics.

Passages also occur in which there is a succession of triads that have no relation one to the other. These are to be analyzed as consecutive tonics, i.e. call each chord the tonic of a key, Fig 197. Do not, however, misuse privilege. Many passages that appear like consecutive tonics may, after a closer examination or enharmonic change of some of the chords, prove to be in one key.













# Lesson XVI.

Consecutive Diminished Seventh Chords, Chromatic Passing Chords, and the Sequene.

PASSING DIMINISHED SEVENTH CHORDS.

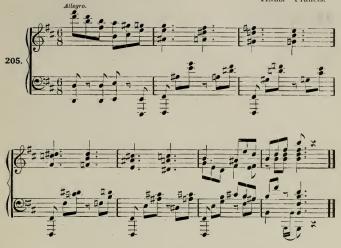
In passages of passing diminished seventh chords merely indicate them as such, marking only the first and last chords. Fig. 200.



Consecutive chords of the diminished seventh occur occasionally in which possibly not more than two members of the chords are present. These are harder to analyze. Examine Fig. 201, where apparently there is a progression of broken minor sixths and diminished sevenths alternating. If, however, the two intervals necessary to complete these chords of the seventh are added, a very clear succession of passing diminished sevenths will result. Passages like this really come under the head of two point writing.







CHROMATIC PASSING CHORDS.

Introduce passing tones in more than two voices and a passing chord is the result. If some of these tones are chromatic passing tones, then the chords are chromatic passing chords.

Progressions of this kind in Lesson IV had to do only with a single chord. In the present lesson a succession of such is treated. The upper voice usually moves by a step or half-step. Fig. 206.

Mark the principal chord as usual, and the chromatic passing chords as such, taking up the usual marking of the principal chords when they reappear.



107























SEQUENCE.

A Sequence is the repetition and transposition of a melodic figure- The interval of transposition should be the same with each repetition Fig. 209.

The transposition may be from one degree to another, or from one key to another.

The sequence is usually accompanied by a sequential movement of harmonies. This should be borne in mind when analyzing the harmony of sequential passages.

In modulatory sequences the dominant or leading tone chords of some of the keys are occasionally altered. There is, nevertheless, a strong key impression because of the sequence. Indicate the key in each of such cases as though no alteration had been made, and mark the altered chords as usual. Fig. 209b.

Find the extent of the figure, mark it with a bracket —, as in Fig. 209, and mark each repetition of this figure in a like manner. Should the figure be changed and be carried out sequentially, proceed in the same way with the new figure. A single repetition is usually sufficient to establish a Sequence. In very short figures, however, those having not more than two to four notes a second repetition may be necessary.



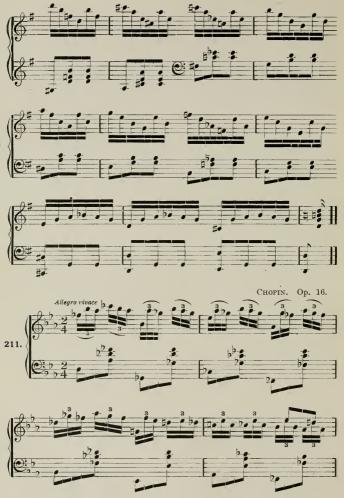


Снорім. Ор. 16.



# EXERCISES.

MENDELSSOHN. Op. 14.







# Lesson XVII.

Two Simultaneous Harmonies, One and Two Part Writing.

Two Harmonies Appearing Simultaneously.

It sometimes occurs that there is a definite impression of two simultaneous harmonies, one of which is other than an Attendant chord, Fig. 213. Mark each chord separately. In cases where the second chord is but an Attendant chord, mark as usual.







TWO PART WRITING.

Under two part writing only such compositions are considered, both parts of which have equal melodic individuality. Those in which one part is clearly a broken chord effect have already been analyzed. Fig. 215.

In analyzing two part writing it is sometimes necessary to supply missing intervals or to group several notes together. The tempo must, however, always be considered. In slow tempo, progressions are often heard as change of harmony, where in quick tempo they would give the impression of but one chord. (See also Lesson 1). The accented note of two notes belonging to the same harmony decides the position of the lowest part of the chord, but in slow tempo both may have to be marked. A root with passing seventh in the lowest part gives the impression of the third inversion only. A chord with the passing seventh in an upper voice unless one of a series of passing tones, mark as a chord of the seventh.







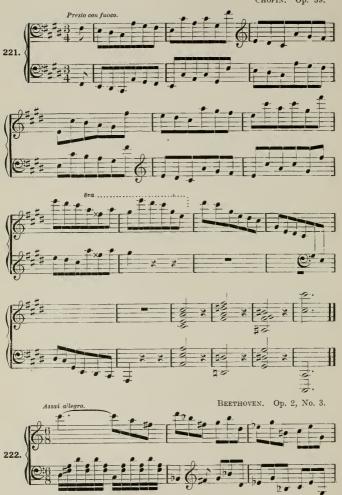


ONE PART WRITING.

In analyzing unaccompanied melodics, the harmonies in many instances are conjectural, since possibly only two tones of the chord appear, and they may be either one of two chords. The same general plan given for analyzing two part writing holds good here. Fig. 219 is an interesting example of one part writing.







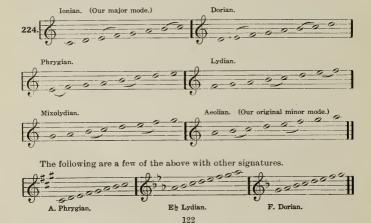




## Lesson XVIII.

# THE CHURCH MODES.

In addition to our modern modes (major and minor) that have been analyzed so far, much music is written in the "Church Modes." There are six of these: the Ionian (our major mode), the Dorian, Phrygian, Lydian, Mixolydian and the Aeolian. The last being the original form of our minor mode. These modes are written as in Fig. 224



On analyzing the above it will be found that the Dorian mode begins on the second degree of a major scale and progresses upward an octave, the Phrygian on the third degree, the Lydian on the fourth, the Mixolydian on the fifth, and the Aeolian on the sixth. The starting point of each mode being its tonic.

Since some of the modern writers are making such frequent use of these modes in producing many of their unique effects, it has seemed advisable to ask for an analysis of the mode as well as the harmony of the following exercises.

In order to find the mode of a composition assemble the different notes of the melody—and harmony if necessary—find the point of repose, put the notes in alphabetical order and compare with Fig. 224.

Do not rely on the signature as a clue to the mode. While e.g. the Dorian mode beginning with d, usually found with the signature of C major, it may also be found with the signature of F major, the b, however, always being natural.

Occasionally modes modulate to other modes This is easily recognized by the appearance of tones foreign to the mode, or by the cadence at the end of the line. Fig. 225a begins in C, Dorian, makes a digression to C Aeolian at the first hold and returns to C Dorian in the next line.

The seventh degree is raised freely in final cadences, particularly in the Dorian, Mixolydian and Aeolian modes. Always indicate it in the analysis.

Tones are sometimes altered for the sake of color, but are not used enough to induce a modulation. Mark these as indicated in previous lessons.

Passing embellishing tones etc. are also often used in altered forms in the harmonization. This does not affect the mode.

The final chord was usually written major, no matter what the mode. This does not affect the analysis of the mode. In analyzing give the name of the mode and analyze the harmonies in this mode.

In marking the mode give also the key from which the mode takes its tones, e.g., C Dorian, F Phrygian etc.

Examine the illustrations with regard to marking keys, chords, modulations, alterations, etc.







 $\mathbf{I}_{\mathbf{4}}^{\,6}$ 

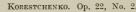










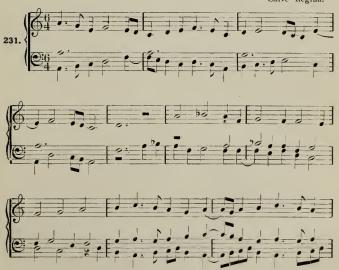














# Lesson XIX.

### REDUCTION.

Reduction in the eliminating of all non-harmonic and unessential chord tones, and the retaining of only those necessary for a simple and clear harmonization. It will be seen from this that after an example has been analyzed harmonically, the matter of reducing it is comparatively simple.

As regards the melody to be reduced, as far as possible follow it in the reduction. An absolute adherence to this is, however, not necessary.

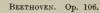
Melodies which transgress the limits of four part writing should be raised or lowered so as to come within the limits.

The reduction should be made in four part writing, even though the example to be reduced is only in one, two or more parts.

Fig. 232 contains several examples reduced and analyzed. An examination of these will no doubt be suggestive. In "b" it has been necessary to introduce five voices in the fourth measure owing to the presence of a complete  $V_9$  chord.























### Lesson XX.

The remaining lessons consist of exercises, which will serve as a review of the preceding lessons.

















# Lesson XXI,

#### EXERCISES.









## Lesson XXII.

#### EXERCISES.























# Lesson XXIV,

## EXERCISES.









End of Lesson XXIV.



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